

Midwest Climate Hub

U.S. DEPARTMENT OF AGRICULTURE

February 6, 2023

Midwest Ag-Focus Climate Outlook

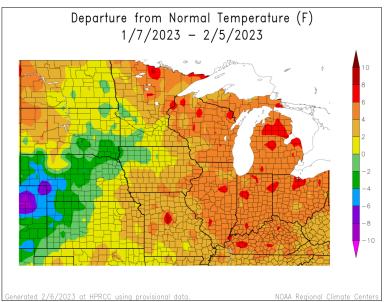
Main Points

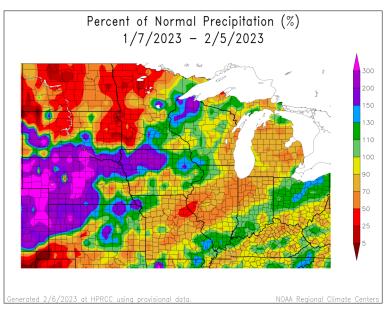


- Drought has eased in some areas but is still pervasive across the region. It appears likely to continue into spring in western areas, while eastern areas have seen more recovery recently.
- Despite two severe cold events, the winter has been warm overall.
- The La Niña influence is fading; a transition to neutral (i.e. no La Niña or El Niño) conditions during the spring is likely.
- At this point there are no major concerns for spring planting, but there is a slight potential for increasing wetness in the eastern Corn Belt.



Current Conditions





A few very cold events have crossed the region during the winter, but overall temperatures have been above average in most areas and well above average in the eastern areas (4 to 8°F in many locations). Snow cover has kept some areas of the Plains colder than average (2 to 6°F). Numerous stations in the eastern Corn Belt are suggesting the top-ten warmest winter or January in most of the region. Precipitation is showing mixed patterns; several storms in the Plains have brought precipitation that is well above average (two to three times), though soils are still quite dry. The precipitation has helped drought conditions, but typical winter precipitation totals are generally lighter. Even two-to-three-times average winter precipitation improves dry conditions only marginally. Snowpack in the Plains is running above average, while around the Great Lakes it is below average (not pictured).

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 2/6/2023.







Impacts

Drought issues continue, though some reduction in dry conditions has occurred, mainly in the eastern areas of the region. In the Plains and the western Midwest, drought conditions are persisting. The snowpack in the Plains will increase runoff, but frozen soils will largely limit soil moisture recovery until spring. Frost depths have been relatively moderate, though some locations in the Plains have reached frost at 3 feet. This is not unexpected given dry soil conditions. Warmer temperatures have also helped ease potential problems across the Midwest.

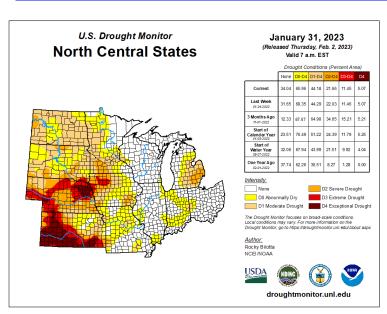
Some of the extreme cold has likely led to damage for some fruit crops (particularly peaches) and has possibly affected winter wheat, though the coldest

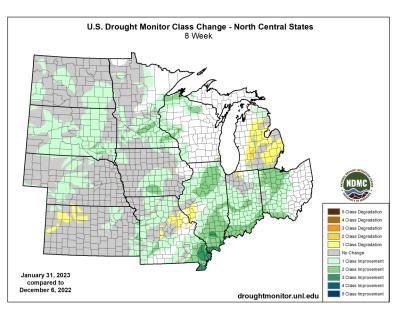
temperatures in the most recent event (early February) stayed further north.

SPORT-LIS 0-100 cm Soil Moisture percentile valid 06 Feb 2023

Reports of losses due to respiratory issues in younger feedlot cattle are showing in parts of the Plains and western Midwest. Specific causes are not clear but possibly due to multiple weather and climate factors.

Check out how your area's freeze dates are changing: https://www.climatehubs.usda.gov/hubs/midwest/tools/exploring-historical-freeze-dates-midwest-and-northeast-regions





Maps Generated by the National Drought Mitigation Center and the Short-term Prediction Research and Transition Center.



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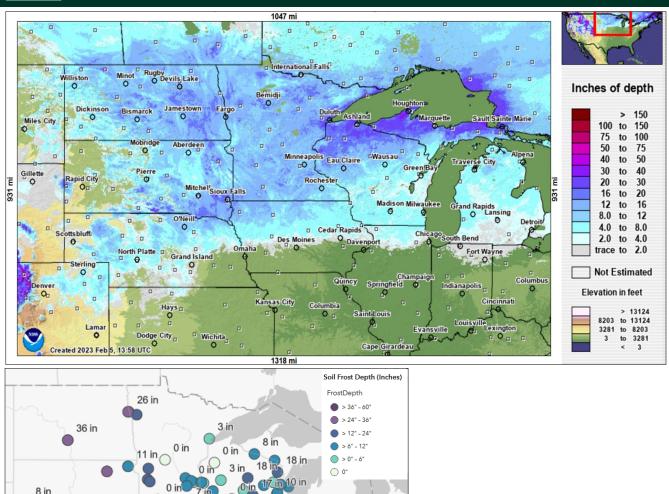
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Maps Generated by the <u>National Operational Hydrologic Remote</u>
<u>Sensing Center</u> and the <u>National Weather Service</u>.



Nearer-term outlooks (6-to-10 and 8-to-14 day) maintain similar patterns with somewhat more likely warmer and wetter conditions across much of the region.

The 30- and 90-day outlooks from NOAA's Climate Prediction Center still show La Niña effects in them, particularly in precipitation. The outlooks for spring maintain slightly increased chances for precipitation in the eastern Corn Belt and the far northern Plains. The 30-day outlook for temperature continues the recent pattern of warmer conditions being slightly more likely in the east and some potentially cooler temperatures in the west. The 90-day outlook falls back to a La Niña-looking pattern with warmer to the south and cooler to the northwest.

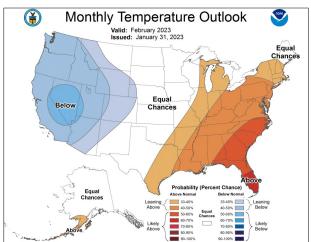


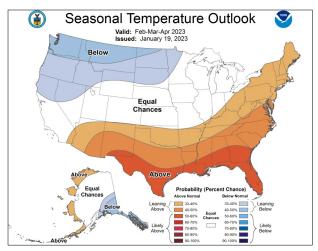


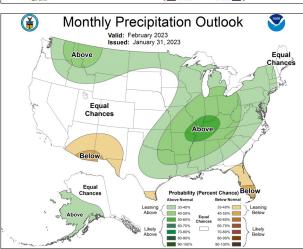
The increased chances of precipitation are not yet problematic (and have generally been beneficial). However, outlooks that "lean wet" may cause concern about delayed planting in the eastern Corn Belt. Despite drier soils, recent and projected precipitation should be monitored. Over much of the western Corn Belt, there is a heavier snow cover, but with frozen soils underneath. Snow will likely melt without issue, but soils will need to thaw and receive spring rainfall in order to improve.

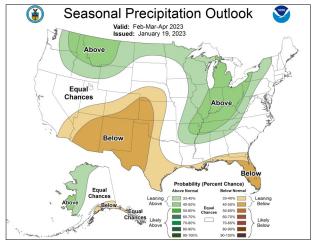
La Niña is likely to weaken in the spring, leaving the Midwest in the neutral phase (non-La Niña/El Niño) into summer. Longerrange models hint at potential quick transition to El Niño by the fall or even as soon as late summer; this rapid transition seems unlikely but worth monitoring. El Niño during the growing season is generally beneficial in the Corn Belt.

At this point, the main concern for the growing season is dry soils carrying over from previous seasons. The likely fading of La Niña reduces growing season drought risk somewhat.









Outlooks provided by the Climate Prediction Center.

Partners and Contributors



<u>United States Department of Agriculture</u> (USDA)

National Oceanic and Atmospheric Administration (NOAA)

Climate Prediction Center (CPC)

National Weather Service (NWS)

National Center for Environmental Information (NCEI)

National Drought Mitigation Center (NDMC)
National Integrated Drought Information
System (NIDIS)

Midwestern Regional Climate Center (MRCC)

Midwest State Climatologists

High Plains Regional Climate Center (HPRCC)



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